

## Reduction of Sodium in the NASA Space Food System

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Excessive sodium content of the average American diet is an issue that is gaining more and more attention due to the implications for chronic disease and thus health care costs. The typical astronaut or cosmonaut dining on the International Space Station (ISS) is consuming even more sodium per day than the average American due to the lack of refrigeration for food and the limited amount of fresh food in the diet. NASA has known for many years that the high sodium in the on orbit diet is an exacerbating factor for the bone loss that occurs in all crew members in microgravity. However, bone loss is reversed upon return to earth normal gravity. After ten years of having US crewmembers on ISS, additional medical issues have emerged in some long duration ISS crewmembers that are not necessarily being reversed upon return to earth. While it is not necessarily thought that the high sodium content of the diet is the cause of these issues, it is thought that reducing sodium intake could potentially help alleviate some of the on orbit symptoms. Thus, there is an urgent focus on sodium reduction in space food. This paper will discuss the strategies and progress of an on-going project at NASA to reformulate the US space food system to reduce the sodium content.